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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,508	05/26/2006	Maximilian Pitschi	14219-109US1 P2003,0316 U	3828
²⁶¹⁶¹ FISH & RICHA	7590 05/08/200 ARDSON PC	8	EXAMINER	
P.O. BOX 1022		LE, DON P		
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
			2819	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/559,508	PITSCHI ET AL.		
Office Action Summary	Examiner	Art Unit		
	Don P. Le	2819		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>26 Mar</u> This action is FINAL . 2b) ☑ This Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2 and 9-13 is/are rejected. 7) ☐ Claim(s) 3-8 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examines 10) ☐ The drawing(s) filed on is/are: a) ☐ access applicant may not request that any objection to the of Replacement drawing sheet(s) including the corrections.	r election requirement. r. epted or b) objected to by the B	e 37 CFR 1.85(a).		
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/5/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte		

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kidoh (US 6,147,574).
- 3. With respect to claim 1, figure 1 of Kidoh discloses a surface acoustic wave filter, comprising:

a piezoelectric substrate (11);

acoustic tracks on the piezoelectric substrate, the acoustic tracks being adjacent and electrically interconnected, the acoustic tracks comprising electro-acoustic transducers, the electro-acoustic transducers comprising an input transducer (12) and an output transducer (13), and

a shielding structure (14) that is metallic and that is connected to ground, the shielding structure being between the acoustic tracks, the shielding structure shielding a first electro-acoustic transducer in a first acoustic track from a second electro-acoustic transducer in a second acoustic track.

4. With respect to claim 2, figure 1 of Kidoh discloses the first and second electro-acoustic transducers each have a bus bar facing the shielding structure, and wherein at least one bus bar facing the shielding structure is electrically floating or

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connected to a voltage other than ground (Kidoh has either 12 or 13 have a bus, top or bottom, faces the shield and it is floating).

5. With respect to claim 9, it is inherent in the apparatus of Kidoh that the transducers and shield would be the same metal unless it is stated otherwise.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kidoh (US 6,147,574) in view of Kimura et al. (US 5,929,723). Kidoh is silent as to what material is used in the metal plating. Kimura discloses an apparatus using aluminum alloy for electrode for the purpose of connecting circuitry. It would have been obvious to one of ordinary skill of art at the time the invention was made to have used aluminum alloy as taught by Kimura for the purpose of providing electrodes for connections.
- 8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kidoh (US 6,147,574) in view of Misawa et al. (US 6,417,574). Kidoh is silent as to how the SAW filter be mounted and the connections inherently will have at least one bump. Misawa discloses a SAW device that is flip chip mounted for the purpose

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of saving space. It would have been obvious to one of ordinary skill of art at the time the invention was made to have mounted the SAW filter of Kidoh in a flip chip arrangement as taught by Misawa for the purpose of space saving.

9. Claim 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kidoh (US 6,147,574). Kidoh is silent as to the dimension of the shielding structure with respect to the transducers. However, it is a matter of design choice to have the dimensions of the shield and transducers with particular values for the purpose of performance, space-saving and costs. It would have been obvious to one of ordinary skill of art at the time the invention was made to have the shield and transducers with particular dimensions as a matter of design choice for the purpose of cost, space and performance requirements.

Allowable Subject Matter

- 10. Claims 3-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 11. The following is an examiner's statement of reasons for allowance:

With respect to claim 3, the prior art does not teach DMS filter further comprising a first coupling transducer in the first acoustic track, the first coupling transducer comprising a first bus bar, a second coupling transducer in the second acoustic track, the second coupling transducer comprising a second bus bar; and a coupling line that electrically connects the first and second bus bars; wherein the

shielding structure is between the first electro-acoustic transducer and the second electro-acoustic transducer.

With respect to claim 7, the prior art does not teach reflectors border the acoustic tracks.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don P. Le whose telephone number is 571-272-1806. The examiner can normally be reached on 7AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barnie Rexford can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Don P Le/ Primary Examiner, Art Unit 2819 5/6/2008